

**A population of the White-spotted Pinion moth *Cosmia diffinis* (L.)(Lep.: Noctuidae) located in Bedfordshire**

At 21.35hrs on the evening of 4 August 2005, the authors recorded a male White-spotted Pinion moth *Cosmia diffinis* (Linn.) to one of five wine-ropes set up along the Carthage Road bridleway running parallel to the John O'Gaunt Golf Course, through a small copse of elms by the village of Potton, near Sandy, Bedfordshire. It was only just getting dark under the trees at this time and the moth was one of only three moths to arrive this early. This was followed by two more males at a Robinson light-trap 100m away and deeper within the copse by 22.30hrs the same evening. The wine-ropes employed a standard mixture of strong-smelling red wine and white sugar, with no other ingredients.

The significance of this result is that three individuals of this nationally rare, elm-dependent species, recorded amongst elms so soon after dusk strongly indicates the presence of a resident population, the first to be located in Bedfordshire since the last individuals were seen at Coppice Wood, Riseley, in 1985 (Arnold *et al.*, 1997. *The butterflies and moths of Bedfordshire*). Other British populations of this moth are currently known only in Huntingdonshire, Cambridgeshire and Essex (Waring *et al.*, 2003. *Field guide to the moths of Great Britain and Ireland*).

PW has been conducting research on the White-spotted Pinion since 1999 as part of Butterfly Conservation's "Action for Threatened Moths" project. Some aspects of the project have included studying the ecology and habitat requirements of the moth as adults and larvae in Huntingdonshire and Cambridgeshire where it is known and monitored (see *Ent. Rec.* **113**: 135-138; **114**: 84-88 & 115-117), discovery and demonstration of a breeding population in Essex (see *Ent. Rec.* **117**: 80-83) and searches for the moth in Bedfordshire (e.g. *Br. J. ent. Nat. Hist.* **18**: 153-155) and elsewhere north to Cheshire and Cumbria (e.g. *Br. J. ent. Nat. Hist.* **16**: 244-245 & 65-66). PW knows of only two British records since 1990 of the moth outside of Huntingdonshire, Cambridgeshire and Essex, despite the fact that it was the first target species for National Moth Night, back in 2001 (*Atropos* **16**: 34-37), during which many light-traps were operated near elms throughout England at an appropriate time of year. The two records are of single individuals recorded by John Day in a 125W MV Skinner light-trap in his garden at Potton (OS grid reference TL 215492), on 2 August 2002 and on 11 August 2003. Both were released the next day. There are no elms in or around John's garden. The nearest are in a copse about 500m to the south (TL 215486) along the Carthage Road bridle-way between grassy fields, a quarry and a golf course. Accordingly PW arranged with John to search for caterpillars of the moth in this copse on 27 May 2005. We were also joined by Andrew Frost. Together we searched for three man hours, but failed to find any larvae of this species, though PW did find one final instar larva of the Lesser-spotted Pinion *Cosmia affinis* between two elm leaves at about head-height (2m). This was on a lower branch of one of a number of young elms (main trunks only 10cm in diameter at should-height) growing together in the dappled shade of larger elm trees. Accordingly PW arranged the above light-trapping evening with John, who does not have a portable generator for his trap and needed assistance. Being a devotee of

wine-ropes, PW added these to his list of equipment. There are old reports that the White-spotted Pinion comes to bait. For example Bretherton (in: *A list of the macro-lepidoptera of the Oxford District, 1940*) reports that in 1934 the species was so numerous at sugar at Tubney Wood that "a hundred could have been taken in one evening". However, PW has tried baiting for this species on several occasions since 1999, with negative results. The most noteworthy occasion was at Overhaul Grove, Cambridgeshire, on 7 August 2003, a really warm, calm, dry, cloudy night with a dusk temperature of 21°C and a night minimum of 15°C (see *British Wildlife* 15: 61). None came to ten wine-ropes despite attraction of an Old Lady moth *Mormo maura* and two to three moths of other, more frequently seen, species per wine-rope, including mainly Large Yellow Underwing *Noctua pronuba*, Common Rustic *Mesapamea secalis* agg., Angle Shades *Phlogophora meticulosa*, Flame Shoulder *Ochropleura plecta* and Common Wainscot *Mythimna pallens*. The lack of White-spotted Pinion at the wine-ropes was also despite the arrival at the light-traps of at least seven of them by 22.30hrs, including a female at 22.10hrs. On the same night PW captured 16 individuals, all males, in a single Robinson trap operated all night in nearby Dry Drayton. It is therefore pleasing to record one White-spotted Pinion to bait at last. It was one of only a few moths to the five wine-ropes on 4 August 2005 - the others comprising a Lesser-spotted Pinion, a Large Yellow Underwing, a Common Rustic, a Svenssons's Copper Underwing *Amphipyra berbera svenssoni* Fletcher and, at 23.20hrs, an immaculate Red Underwing *Catocala nupta* (L.). The weather on this occasion was cloudy, dry, 19°C at dusk, with a light breeze, no moon and at 23.30hrs light rain began. The White-spotted Pinion was still on the wine-rope at 23.20hrs when we began packing up the ropes.

The two light traps at the copse at Potton were operated until mid-night and the catches also included four Lesser-spotted Pinion, a Least Carpet *Idaea rusticata atrosignaria* and a Dusky Thorn *Ennomos fuscantaria*. The Least Carpet is of interest in that it is expanding its range and breeding area. When the county list for Bedfordshire was published in 1997 (Arnold *et al.* above) there were only three records for the county, all from the Rothamsted Insect Survey light-trap at Cockayne Hatley, in 1976, 1980 and 1996. In 2004 JD recorded the first Least Carpets for his garden in Potton, on 24 & 31 July. None was seen during trapping at this site from 2001-2003 but an additional individual was captured on 30 July 2005 so perhaps they are now breeding locally. The Dusky Thorn is of interest in that it has suffered a massive decline in abundance in Britain since 1968, as monitored by the Rothamsted Insect Survey. For every 1000 Dusky Thorn in 1968, only 20 are present today (*British Wildlife* 16: 390). On 8 & 22 August 2005 JD recorded the Dusky Thorn in his garden for the first time ever, since he started trapping there in 2001.

We note that there are other small copses and hedgerows with elms within view of the Carthagena Road bridleway site where we have found the White-spotted Pinion and we suspect it may be breeding more widely in this area. Hopefully it will be possible to organise further searches both for adults and larvae in future years.

PW would like to thank John Day and Andrew Frost for their help with the survey, Mr Brookman who owns the adjacent farm and quarry, for access permission, Mr Stephen Anthony of the John O'Gaunt Golf Course for his co-operation and interest and Butterfly Conservation who finance the project, with contributory funding from English Nature.— PAUL WARING & JOHN DAY, Windmill View, 1366 Lincoln Road, Werrington, Peterborough, PE4 6LS.

***Biston betularia* L. ab. *albapicata* Cockayne (Lep.: Geometridae) in Kent**

This aberration was described by Cockayne in 1953 (*Ent. Rec.* **65**: 168, plate 13) from a specimen in the National (RCK) Collection, taken at Tibshelf, Derbyshire in 1925.

It closely resembles ab. *carbonaria* Jordan, but the apex of the forewing at its extremity is white, although the bordering fringe remains black, and on the hindwing costa there is a small area which is whitish, speckled black. A male specimen was attracted to my garden mv light here at Dartford on 21 July 2005. This is an interesting aberration, perhaps easily overlooked, and one that I have not seen previously. It is not listed by Chalmers-Hunt 1976 (*The butterflies and Moths of Kent. Suppl. Ent. Rec.* **88** 156) and would appear to be a rarity. The Dartford specimen is probably the first to be noted for the county.— B. K. WEST, 36 Briar Road, Dartford, Kent DA5 2HN.

**Slender Ground-hopper *Tetrix subulata* (L.) (Orth.: Tetrigidae) in Northamptonshire**

According to Ragge (1965. *Grasshoppers, Crickets and Cockroaches of the British Isles*. Warne) and, more recently Marshall & Haes (1990. *Grasshoppers and allied insects of Great Britain and Ireland*), the Slender Ground-hopper *Tetrix subulata* has not been recorded from Northamptonshire. Thus, it was with some pleasure that I discovered several examples inhabiting a small overflow pond near to the village of Braunston, Northamptonshire. All of the insects jumped into the water upon my approach and it was quite fascinating to watch them, swim ashore, just under the surface. One was approached by a Common Pond Skater *Gerris lacustris* (L.) and immediately stopped swimming until the danger had passed. One wonders if the groundhopper was aware of the predatory nature of the skater.

The pond is often completely dry by July and does not fill up again until the winter rains. Do the immature adult hoppers over-winter in the mud at the bottom of the pond? The surrounding vegetation is usually cropped short by cattle that wallow whilst water remains. This must make it a hazardous habitat for the ground-hopper. — K. F. WILLIAMS, Arcanum House, 45 Braunston Road, Daventry, Northamptonshire NN11 9BY.